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Washington, D.C. 20231

MARCH 08, 2001

PTAS

CLARK & ELBING LLP
KAREN L. ELBING, PH.D.
176 FEDERAL STREET
BOSTON, MA 02110



101566513A*

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/11/2000

REEL/FRAME: 011370/0420
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

XU, WILSON C.

DOC DATE: 10/11/2000

ASSIGNEE:

GENERAL HOSPITAL CORPORATION, THE
55 FRUIT STREET
BOSTON, MASSACHUSETTS 02114

SERIAL NUMBER: 09189653
PATENT NUMBER: 6171792

FILING DATE: 11/10/1998
ISSUE DATE: 01/09/2001

SERIAL NUMBER: 60065273
PATENT NUMBER:

FILING DATE: 11/10/1997
ISSUE DATE:

JEFFREY OLSEN, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

12-29-2000



Substitute Form PTO-1595

101566513

Docket Number: 00786/317002

Certificate of Mailing: Date of Deposit: <u>December 6, 2000</u>	
I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to BOX ASSIGNMENT, Director of the United States Patent and Trademark Office, Washington, D.C. 20231.	
Colleen Coyne Printed Name	<i>Colleen Coyne</i> Signature

RECORDATION FORM COVER SHEET PATENTS ONLY

Please record the attached document.

1. Names of all conveying parties: C. Wilson Xu <i>12-11-00</i> Additional names attached: NO	2. Names and addresses of all receiving parties: The General Hospital Corporation 55 Fruit Street Boston, MA 02114 Additional names/addresses attached: NO
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: _____ Execution Date: 10/11/00	
4. Application numbers or patent numbers: A. Patent Application Numbers: 09/189,653 60/065,273	B. Patent Numbers:
5. Name and address of party to whom correspondence concerning document should be mailed: Karen L. Elbing, Ph.D. Reg. No. 35,238 Clark & Elbing LLP 176 Federal Street Boston, MA 02110	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR 3.41): \$80.00 <input checked="" type="checkbox"/> Fee enclosed <input type="checkbox"/> Authorized to charge deposit account 8. Deposit account number: 03-2095. If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to Deposit Account No. 03-2095.

DO NOT USE THIS SPACE

9. Statement and signature: *To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.*

Karen L. Elbing, Ph.D.
Name of person signing

Signature

6 December 2000
Date

12/28/2000 6TON11 00000128 09189653

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200 F-002 8/06/018 P-637 T

617-237-1558

FROM-CLARK & ELBING LLP

03:45pm

08-20-03

ASSIGNMENT

For valuable consideration, we,

Full Name of Assignor	City	State (and Country if not USA)
Roger Brent	Berkeley	California
C. Wilson Xu	New York	New York
Andrew R. Mendelsohn	Sausalito	California
Walter L. Lok	San Francisco	California

hereby assign to

Full Name of Assignee	State of Incorporation	Business Address
The General Hospital Corporation	Massachusetts	55 Fruit Street Boston, MA 02114

and to its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of one or more applications for United States Patent signed by us, identified as:

Title of Application	Filing Date	Serial Number
DETECTION SYSTEMS FOR REGISTERING PROTEIN INTERACTIONS AND FUNCTIONAL RELATIONSHIPS	November 10, 1998	09/189,653
DETECTION SYSTEMS FOR REGISTERING PROTEIN INTERACTIONS AND FUNCTIONAL RELATIONSHIPS	November 10, 1997	60/065,273

and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment includes said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our names or in its own name for patents, utility models, design registrations and like rights of exclusion, and for inventors' certificates for

said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation, to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 19____

ROGER BRENT

L.S.

STATE OF _____

ss.

COUNTY OF _____

Before me this _____ day of _____, 19____, personally appeared ROGER BRENT known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at 1275 York Ave, NY, NY 10021
this 11th day of October, 192000

C. Wilson Xu

C. WILSON XU

L.S.

STATE OF New York

ss.

COUNTY OF New York

Before me this 11th day of OCTOBER, 192000, personally appeared C. WILSON XU known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Gail M. Platoni

Notary Public

My Commission Expires:

[Notary's Seal Here]

GAIL M. PLATONI
NOTARY PUBLIC, State of New York
No. 03-4907327
Qualified in Bronx County
Commission Expires Sept. 28, 2001

IN WITNESS WHEREOF, I hereto set my hand and seal at _____

this _____ day of _____, 19____

ANDREW R. MENDELSON

L.S.

STATE OF _____

COUNTY OF _____

Before me this _____ day of _____, 19____, personally appeared ANDREW R. MENDELSON known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at _____

this _____ day of _____, 19____

WALTER L. LOK

L.S.

STATE OF _____

COUNTY OF _____

Before me this _____ day of _____, 19____, personally appeared WALTER L. LOK known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

DECEMBER 13, 2000

PTAS

CLARK & ELBING LLP
KAREN L. ELBING
176 FEDERAL STREET
BOSTON, MA 02110



101494542A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/10/2000

REEL/FRAME: 011165/0616
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
BRENT, ROGER

DOC DATE: 02/05/1999

ASSIGNOR:
LOK, WALTER L.

DOC DATE: 01/26/1999

ASSIGNEE:
GENERAL HOSPITAL CORPORATION, THE
55 FRUIT STREET
BOSTON, MASSACHUSETTS 02114

SERIAL NUMBER: 09189653
PATENT NUMBER:

FILING DATE: 11/10/1998
ISSUE DATE:

MARCUS KIRK, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

10-23-2000



OCT 10

Substitute Form PTO-1595

101494542

Attorney Docket Number: 00786/317002

Certificate of Mailing: Date of Deposit October 4, 2000
I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to BOX ASSIGNMENT, Director of the United States Patent and Trademark Office, Washington, D.C. 20231.
Colleen Coyne
Printed Name Colleen Coyne Signature

RECORDATION FORM COVER SHEET
PATENTS ONLY

Please record the attached document.

1. Names of all conveying parties: Roger Brent Walter L. Lok Additional names attached: NO	2. Names and addresses of all receiving parties: The General Hospital Corporation 55 Fruit Street Boston, MA 02114 Additional names/addresses attached: NO
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: _____ Execution Date: 2/5/99 and 1/26/99, respectively	<u>med 10/10/00</u>
4. Application numbers or patent numbers: A. Patent Application Numbers: 09/189,653	
5. Name and address of party to whom correspondence concerning document should be mailed: Karen L. Elbing, Ph.D. Reg. No. 35,238 Clark & Elbing LLP 176 Federal Street Boston, MA 02110	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR 3.41): \$40.00 <input checked="" type="checkbox"/> Fee enclosed <input type="checkbox"/> Authorized to charge deposit account 8. Deposit account number: 03-2095. If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to Deposit Account No. 03-2095.

DO NOT USE THIS SPACE

9. Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.

Karen L. Elbing, Ph.D.
Name of person signing

[Signature]
Signature

4 October 2000
Date

ASSIGNMENT

For valuable consideration, we,

Full Name of Assignor	City	State (and Country if not USA)
Roger Brent	Berkeley	California
C. Wilson Xu	New York	New York
Andrew R. Mendelsohn	Providence	Rhode Island
Walter L. Lok	San Francisco	California

hereby assign to

Full Name of Assignee	State of Incorporation	Business Address
The General Hospital Corporation	Massachusetts	55 Fruit Street Boston, MA 02114

and to its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of one or more applications for United States Patent signed by us, identified as:

Title of Application	Filing Date	Serial Number
DETECTION SYSTEMS FOR REGISTERING PROTEIN INTERACTIONS AND FUNCTIONAL RELATIONSHIPS	November 10, 1998	09/189,653
DETECTION SYSTEMS FOR REGISTERING PROTEIN INTERACTIONS AND FUNCTIONAL RELATIONSHIPS	November 10, 1997	60/065,273

and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment includes said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our names or in its own name for patents, utility models, design registrations and like rights of exclusion, and for inventors' certificates for

said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation, to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at 2188 S. HATTY
this 19th day of JAN, 1999

My RA

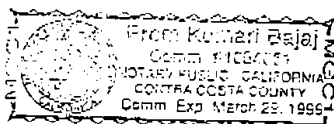
ROGER BRENT

STATE OF CALIFORNIA

COUNTY OF ALFAMA

:ss.

Before me this 5th day of Feb, 1999, personally appeared ROGER BRENT
proved known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.



[Signature]
Notary Public

My Commission Expires: March 29, 1999

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 19____

C. WILSON XU

STATE OF _____

COUNTY OF _____

:ss.

Before me this _____ day of _____, 19____, personally appeared C. WILSON XU
known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 19____

L.S.
ANDREW R. MENDELSON
STATE OF _____
COUNTY OF _____

Before me this _____ day of _____, 19____, personally appeared ANDREW R. MENDELSON known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at Berkeley California
this 26th day of January, 1999

Walter L. Lok

L.S.
WALTER L. LOK
STATE OF California
COUNTY OF Alameda

Before me this 26th day of January 1999, personally appeared WALTER L. LOK known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

[Signature]

Notary Public

My Commission Expires: Jan 15, 01

[Notary's Seal Here]



Substitute Form PTO-1595

Attorney Docket Number: 00786/317002

Certificate of Mailing: Date of Deposit, August 14, 2003

I hereby certify under 37 C.F.R. § 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to Mail Stop Assignment Recordation Services, Director of the U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

Rosemarie Perillo
Printed Name

Rosemarie Perillo
Signature of Person Mailing Correspondence

RECORDATION FORM COVER SHEET PATENTS ONLY

Please record the attached document.

<p>1. Names of all conveying parties:</p> <p>Andrew R. Mendelsohn</p> <p>Additional names attached: NO</p>	<p>2. Names and addresses of all receiving parties:</p> <p>The General Hospital Corporation 55 Fruit Street Boston, MA 02114</p> <p>Additional names/addresses attached: NO</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment</p> <p><input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement</p> <p><input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other: _____</p> <p>Execution Date: 8/4/03</p>	
<p>4. Application numbers or patent numbers:</p> <p>A. Patent Application Numbers: 09/189,653 (now U.S. Patent No. 6,171,792 B1) 60/065,273</p>	<p>B. Patent Numbers:</p>
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Karen L. Elbing, Ph.D., REG. NO. 35,238 Clark & Elbing LLP 101 Federal Street Boston, MA 02110 Customer No.: 21559</p>	<p>6. Total number of applications/patents involved: 2</p> <p>7. Total fee (37 C.F.R. § 3.41): \$80.00 <input checked="" type="checkbox"/> Fee enclosed <input type="checkbox"/> Authorized to charge deposit account</p> <p>8. Deposit account number: 03-2095. If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to Deposit Account No. 03-2095.</p>

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9. Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document or a true copy thereof.

Kristina Bieker-Brady, Ph.D.
Name of person signing

Kristina Bieker-Brady
Signature

August 14, 2003
Date

ASSIGNMENT

For valuable consideration, we,

Full Name of Assignor	City	State (and Country if not USA)
Roger Brent	Berkeley	California
C. Wilson Xu	New York	New York
Andrew R. Mendelsohn	Sausalito	California
Walter L. Lok	San Francisco	California

hereby assign to

Full Name of Assignee	State of Incorporation	Business Address
The General Hospital Corporation	Massachusetts	55 Fruit Street Boston, MA 02114

and to its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of one or more applications for United States Patent signed by us, identified as:

Title of Application	Filing Date	Serial Number
DETECTION SYSTEMS FOR REGISTERING PROTEIN INTERACTIONS AND FUNCTIONAL RELATIONSHIPS	November 10, 1998	09/189,653
DETECTION SYSTEMS FOR REGISTERING PROTEIN INTERACTIONS AND FUNCTIONAL RELATIONSHIPS	November 10, 1997	60/065,273

and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment includes said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our names or in its own name for patents, utility models, design registrations and like rights of exclusion, and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation, to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the

Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 19____

L.S.
ROGER BRENT

STATE OF _____ :
:ss.
COUNTY OF _____ :

Before me this _____ day of _____, 19____, personally appeared ROGER BRENT known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 19____

L.S.
C. WILSON XU

STATE OF _____ :
:ss.
COUNTY OF _____ :

Before me this _____ day of _____, 19____, personally appeared C. WILSON XU known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at BERKELEY, CA
this 4th day of AUGUST, 192003

Andrew R. Mendelsohn L.S.
ANDREW R. MENDELSON
STATE OF CALIFORNIA
COUNTY OF ALAMEDA

Before me this 4th day of AUGUST, 2003, personally appeared ANDREW R. MENDELSON known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.



Mary S. Bapi
Notary Public
My Commission Expires: FEB 11, 2004

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at _____
this _____ day of _____, 19____

WALTER L. LOK

STATE OF _____

ss.

COUNTY OF _____

Before me this _____ day of _____, 19____, personally appeared WALTER L. LOK known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's Seal Here]

RECEIVED

2003

GROUP 1600